AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) In a cellular mobile radio communications system supporting communications over a radio interface between a radio network and mobile terminals, a method comprising:

counting a number of increase transmit power control commands issued in the cell over a time period;

determining a load condition of a cell, without having to measure a radio parameter, based on ~~a~~ the number of increase transmit power control commands ~~issued in the cell over a time period~~ relative to a total number of transmit power commands issued in the cell for that time period, and

regulating a traffic condition in the cell based on the determined load situation including if the number of increase transmit power commands relative to the total number of transmit power commands exceeds a threshold, taking action to reduce the amount of traffic in the cell.

2. (Original) The method in claim 1, wherein the traffic condition relates to a load condition in the cell.

3. (Original) The method in claim 1, wherein the traffic condition relates to a capacity in the cell.

4. (Original) The method in claim 1, wherein the traffic condition is an interference level in the cell, the method further comprising:

controlling the interference level using the determined value of the load condition.

5. (Original) The method in claim 1, wherein the traffic condition is transmit power level, the method further comprising:

controlling a transmit power of a base station or a channel in the cell using the determined value of the radio condition.

6. (Original) The method in claim 1, wherein the traffic condition is transmit power, the method further comprising:

controlling the transmit power of a mobile station using the determined load condition.

7. (Original) The method in claim 1, wherein the load condition is related to a power level.

8. (Original) The method in claim 7, wherein the power level is the total power level detected at a base station in the cell.

9. (Cancelled)

10. (Cancelled)

11. (Previously Presented) The method in claim 1, wherein the action is reducing a signal level in the cell.

12. (Cancelled)

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~~13.~~ (Currently Amended) In a cellular mobile radio communications system supporting communications over a radio interface between a radio network and mobile terminals, a method comprising:

counting a number of increase transmit power control commands and a number of decrease transmit power control commands issued over a time period in the cell;

determining a load condition of a cell, without having to measure a radio parameter, based on ~~issued transmit power control commands including monitoring a first~~ the number of increase transmit power commands ~~issued in the cell over a time period~~ relative to a the ~~second~~ number of decrease transmit power commands ~~issued in the cell for that time period,~~; and

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regulating a traffic condition in the cell based on the determined load situation including if a difference between the number of increase transmit power commands and the number of decrease transmit power commands exceeds a threshold, taking action to reduce the number of increase transmit power commands in the cell.

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~~14.~~ (Original) The method in claim ~~13~~, wherein the action is reducing a signal level in the cell.

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~~15.~~ (Original) The method in claim 1, further comprising:

measuring a value associated with the load condition, and

using the measured value along with the determined value of the load condition to regulate the traffic condition in the mobile radio communications system.

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~~16.~~ (Original) The method in claim ~~15~~, wherein the measured value is a received power or interference level in the cell.

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~~17.~~ (Original) The method in claim 1, further comprising:

weighting each issued transmit power control command based on a predetermined factor, and

determining the load situation based on the weighted commands.

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~~18.~~ (Original) The method in claim ~~17~~, wherein the predetermined factor is a bit rate associated with the issued transmit power control command.

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~~19.~~ (Original) The method in claim ~~17~~, wherein the predetermined factor is the activity factor of a connection associated with the issued transmit power control command.

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~~20.~~ (Previously Presented) In a mobile radio communications system supporting communications over a radio interface between a radio network and mobile terminals, a method comprising:

determining a first number of transmit power increase commands from the radio network to mobile terminals in a cell in a time period;

determining a second number of transmit power commands from the radio network to mobile terminals in the cell in the time period;

determining a third number associated with the first and second numbers for the time period;

comparing the third number to a first threshold; and

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if the third number exceeds the first threshold, indicating an undesirable condition in the cell.

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21. (Original) The method in claim 20, wherein the second number is a total number of transmit power commands in the time period, and the third number is a percentage of the first number to the second number.

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22. (Original) The method in claim 20, wherein the second number is a number of decrease transmit power commands in the time period, and the third number is a difference between the first number and the second number.

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23. (Original) The method in claim 21, wherein the first number is determined by counting transmit power increase commands and the second number is determined by counting transmit power decrease commands.

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24. (Original) The method in claim 20, further comprising:

determining an average of the third number over a predetermined time interval, wherein the averaged third number is compared to the first threshold.

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25. (Original) The method in claim 20, further comprising:

determining a rate of change of the third number;

determining if the rate of change of the third number exceeds a second threshold; and

if it does, decreasing the first threshold.

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26. (Original) The method in claim 20, further comprising:

measuring a signal level in the cell;

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comparing the measured signal level in the cell to a signal level threshold; and

if the measured level in the cell exceeds the signal level threshold and if the third number exceeds the first threshold, indicating an undesirable condition in the cell.

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~~27.~~ (Original) The method in claim ~~20~~, wherein the undesirable condition is an overload condition.

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~~28.~~ (Original) The method in claim ~~20~~, wherein the undesirable condition is too high of an interference or power level in the cell.

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~~29.~~ (Original) The method in claim ~~20~~, further comprising:

regulating a traffic condition of the cell if the undesirable condition is signaled.

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~~30.~~ (Original) The method in claim ~~20~~, further comprising:

B1 performing congestion control in the cell if the undesirable condition is signaled.

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~~31.~~ (Original) The method in claim ~~20~~, further comprising:

performing admission control in the cell based on a comparison of the third number and the first threshold.

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~~32.~~ (Original) The method in claim ~~20~~, wherein the increase transmit power commands increment a counter and the decrease transmit power commands decrement the counter.

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~~33.~~ (Original) The method in claim ~~19~~, wherein the first and second numbers are based on weighted transmit power commands.

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34. (Previously Presented) In a mobile radio communications system supporting communications over a radio interface between a radio network and mobile terminals, a radio network node, comprising:

a counter for counting a first number of transmit power increase commands from the radio network to mobile terminals in a cell in a time period and a second number of transmit power commands from the radio network to mobile terminals in the cell in the time period;

a first comparator for comparing a third number associated with the first and second numbers for the time period with a first threshold; and

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35. (Original) The radio network node in claim 34, wherein the second number is a total number of transmit power commands in the time period, and the third number is a percentage of the first number to the second number.

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36. (Original) The radio network node in claim 34, wherein the second number is a number of decrease transmit power commands in the time period, and the third number is a difference between the first number and the second number, and wherein the counter is incremented with each increase transmit power command and decremented for each decrease transmit power command.

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37. (Original) The radio network node in claim 34, wherein the first number is determined by counting transmit power increase commands and the second number is determined by counting transmit power decrease commands.

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38. (Original) The radio network node in claim 34, further comprising:

an averager for determining an average of the third number over a predetermined time interval,

wherein the first comparator compares the third number to the first threshold.

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39. (Original) The radio network node in claim 34, further comprising:

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a rate of change detector for determining a rate of change of the third number;

a second comparator for determining if the rate of change of the third number exceeds a second threshold,

wherein if the rate of change of the third number exceeds a second threshold, the controller decreases the first threshold.

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40. (Original) The radio network node in claim 34, further comprising:

a sensor used for measuring a signal level in the cell, and

a second comparator for comparing the measured signal level in the cell to a signal level threshold,

wherein if the measured signal level in the cell exceeds the signal level threshold and if the third number exceeds the first threshold, the controller detects the undesirable condition in the cell.

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~~41.~~ (Original) The radio network node in claim ~~34~~, wherein the undesirable condition is an overload condition.

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~~42.~~ (Original) The radio network node in claim ~~34~~, wherein the undesirable condition is too high of an interference or power level in the cell.

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~~43.~~ (Original) The radio network node in claim ~~34~~, wherein the controller regulates a traffic condition of the cell if the undesirable condition is detected.

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~~44.~~ (Original) The radio network node in claim ~~34~~, wherein the first and second numbers are based on weighted transmit power commands.

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~~45.~~ (Currently Amended) In a cellular mobile radio communications system supporting communications over a radio interface between a radio network and mobile terminals, apparatus comprising:

a counter for counting a number of increase transmit power control commands issued in the cell over a time period;

electronic circuitry configured to determine a load condition of a cell, without having to measure the load condition, based on the a number of increase transmit power control commands ~~issued in the cell over a time period~~ relative to a total number of transmit power commands issued in the cell for the time period, and

a controller configured to regulate a traffic condition in the cell based on the determined load condition including if the number of increase transmit power commands relative to the total number of transmit power commands exceeds a threshold, to take action to reduce the amount of traffic in the cell.

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~~46.~~ (Original) The apparatus in claim ~~45~~, wherein the electronic circuitry includes a counter.

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~~47.~~ (Original) The apparatus in claim ~~46~~, wherein the counter is configured to increment with each increase transmit power command and to decrement with each decrease transmit power command.

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~~48.~~ (Original) The apparatus in claim ~~47~~, further comprising:

means for averaging the counter output.

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~~49.~~ (Original) The apparatus in claim ~~48~~, further comprising:

means for determining a derivative of the counter output.

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~~50.~~ (Original) The apparatus in claim ~~48~~, further comprising:

means for measuring a power level in the cell,

wherein the controller is configured to regulate a traffic condition in the cell based on the determined load condition and the measured power level in the cell.

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~~51.~~ (Original) The apparatus in claim ~~45~~, further comprising:

means for weighting the issued transmit power control commands based on a predetermined factor,

wherein the electronic circuitry is configured to determine the load condition based on the weighted commands.

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~~52.~~ (Original) The apparatus in claim ~~51~~, wherein the predetermined factor is a bit rate associated with the issued transmit power control command.

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